



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D4842-1
Job Sheet 169630

Part No: D4842-1

Job Qty: 10 ea

Part Name: Lower Cutter Deflector



Part Weight: 0 lbs

Status: Scheduled

Priority: High

Job Created: 12/15/17

Job Tracking No:

Due Date: 12/21/17

Created By: Jason Leroux

Type: SOLD

Description:

Note: DWG REV B SHEET 2 IPP REV:A 13.04.26 NEW ISSUE DD VERF:JLM IPP REV:B PROCESS CHANGE
13/10/29 JFS VERIFY BY: JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
90	Start up Operation	10 Ea	12/20/17	12/20/17	0.00	0.00	Start Up Machining-3		FK 18-01-05
100	Bandsaw	10 pcs	12/20/17	12/20/17	0.00	4.74	Bandsaw1		FK 18-01-05
110	CNC Vertical Machining	10 pcs	12/21/17	12/21/17	0.00	4.74	HAAS1-5		FK 18-01-05
130	QC	10 pcs	12/21/17	12/21/17	0.00	0.00	QC8 Machining-3		FK 18-01-05
140	Outsource	10 pcs	12/21/17	12/21/17			ATG001-VC		18-02-03
150	Packaging	10 pcs	12/21/17	12/21/17	0.00	0.00	Packaging2		18-02-03
155	QC	10 pcs	12/21/17	12/21/17	0.00	0.00	QC5		38
180	Packaging	10 pcs	12/21/17	12/21/17	0.00	0.00	Packaging3-2		9-80 SDC
190	QC21-SA	10 Ea	12/21/17	12/21/17	0.00	0.00	QC21		21

Part Op 100 - Cut Blank at 19.500" *** ONE BLANK MAKES TWO PARTS***

Descriptions: 110 - 1-Machine per folio FB222 DWG REV: _____ FOLIO REV: _____ 2- deburr and break all sharp edges

130 - QC8- Inspect parts - second check

140 - Outsource process-Anodize per QSI017 4.1.10.1 Issue P/O to ATG : _____ AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF-23377 TYPE 1 CLASS N, 1-2 MIL MAX Certification of Conformity is required

150 - Receive & Inspect for Damage & Mat'l Certs

155 - QC5- Inspect part completeness to step on W/O

180 - Identify as per dwg & Stock Location: _____

190 - QC21- Final Inspection - Work Order Release

Job Allocations

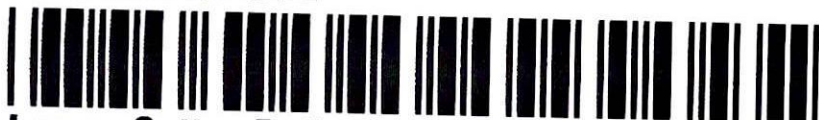
Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	M7075T6S.375X5.000	8	8	0	0

5017359

5022980

DART
AEROSPACE
S022982

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Hawkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



Lower Cutter Deflector

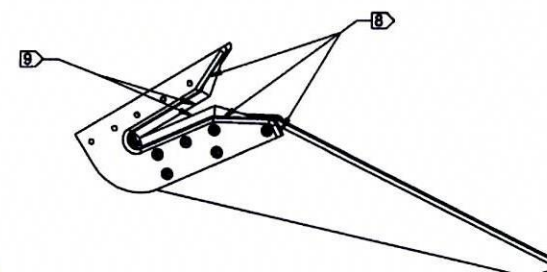
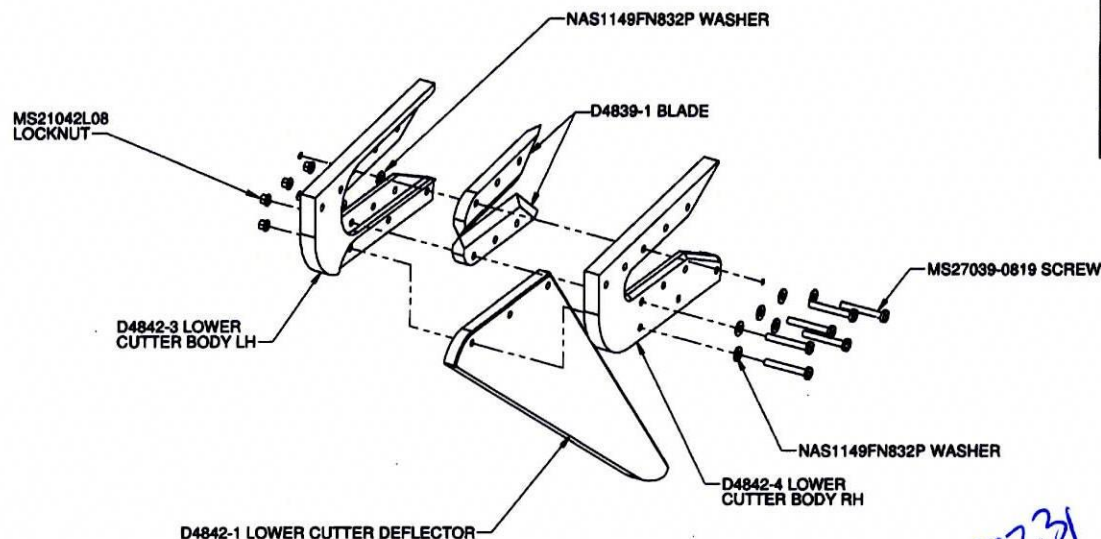
PART NO: D4842-1
Revision:
Operation: Start up Operation
Change No:

Mfg Date: 12/15/17 Job No: 169630
--

Part Specifications					
Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Lower Cutter Deflector	0.340Inches + 0.000 - 0.003	0.340 0.337		
2	Lower Cutter Deflector	0.040Inches ± 0.030	0.070 0.010		
3	Lower Cutter Deflector	45.0Degrees ± 0.5	45.5 44.5		
4	Lower Cutter Deflector	0.700Inches ± 0.030	0.730 0.670		
5	Lower Cutter Deflector	8.650Inches ± 0.030	8.680 8.620		
6	Lower Cutter Deflector	0.380Inches ± 0.030	0.410 0.350		
7	Lower Cutter Deflector	0.177Inches + 0.005 - 0.001	0.182 0.176		
8	Lower Cutter Deflector	0.320Inches ± 0.030	0.350 0.290		
9	Lower Cutter Deflector	0.630Inches ± 0.030	0.660 0.600		
10	Lower Cutter Deflector	0.970Inches ± 0.030	1.000 0.940	Radius	
11	Lower Cutter Deflector	2.110Inches ± 0.005	2.115 2.105		
12	Lower Cutter Deflector	2.110Inches ± 0.005	2.115 2.105		
13	Lower Cutter Deflector	0.250Inches ± 0.030	0.280 0.220	Radius	
14	Lower Cutter Deflector	0.130Inches ± 0.030	0.160 0.100		
15	Lower Cutter Deflector	45.0Degrees ± 0.5	45.5 44.5		

Plex 12/15/17 10:05 AM dart.leroux.jason

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4842-041	LOWER CUTTER ASSY
1	2	D4839-1	BLADE
2	1	D4842-1	LOWER CUTTER DEFLECTOR
3	1	D4842-3	LOWER CUTTER BODY LH
4	1	D4842-4	LOWER CUTTER BODY RH
5	6	MS21042L08	LOCKNUT
6	6	MS27039-0819	SCREW
7	12	NAS1149FN832P	WASHER
8	A/R	LOCTITE 588	RTV SEALANT



D4842-041 LOWER CUTTER ASSEMBLY

UNDER REVIEW

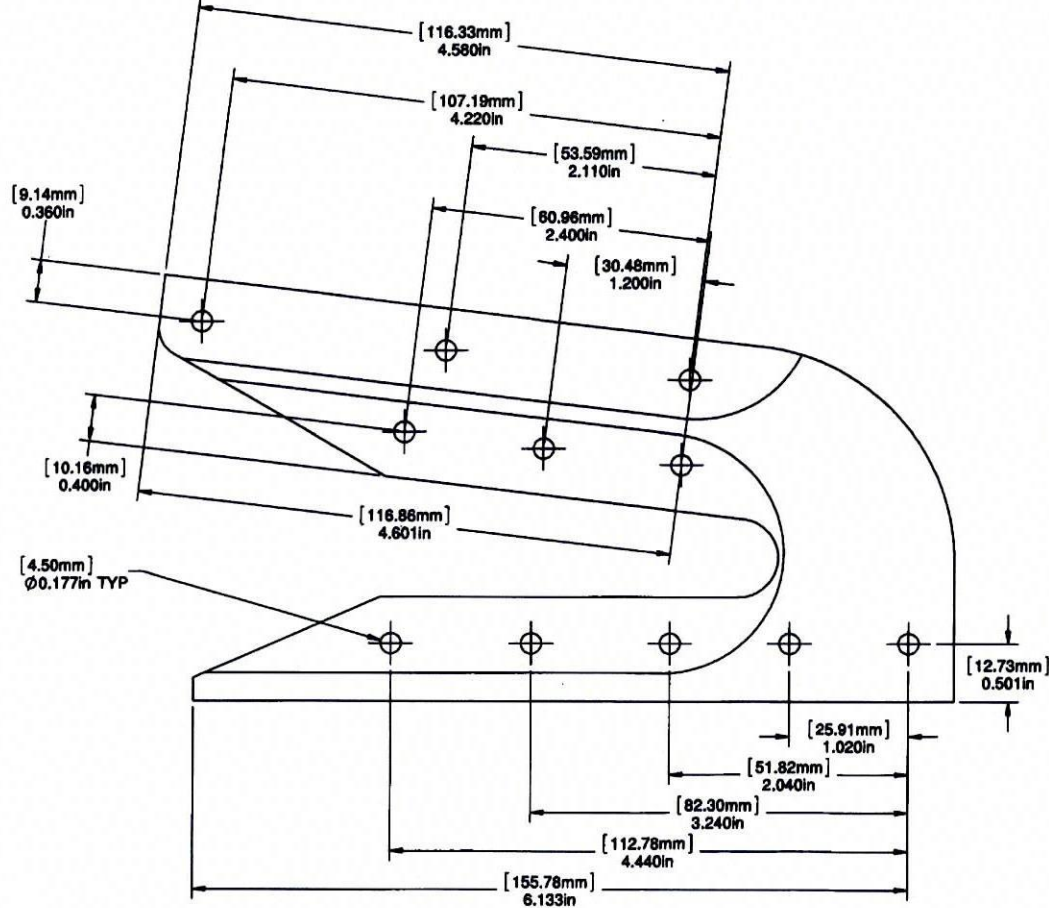
URF 16-692 WM
16-12-21

RELEASED
2013-10-31

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: N/A
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4842-041", AGUSTA WESTLAND KIT NUMBER "TBD", REVISION, BATCH NUMBER AND MANUFACTURE DATE, USING AN X-TENSION STAMP, AS PER QSI 044 METHOD 6.2
- 7) WEIGHT: 2.79 lbs (1.26 KGS)
- 8) APPLY RTV SEALANT TO ALL FAYING SURFACES UPON ASSEMBLY
- 9) CUTTING EDGE INTENDED TO BE SHARP. DO NOT BREAK SHARP EDGE.

B	CORRECT TOLERANCES (ZN B1-2) (ZN B1-3, D2-3)	DW	13.10.17
A	NEW RELEASE	DB	13.05.23
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DW		
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.	al	D4842	SHEET 1 OF 6
APPROVED	12	TITLE	SCALE
DE APPR.	12	LOWER CUTTER ASSY	NTS
DATE	13.10.17	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



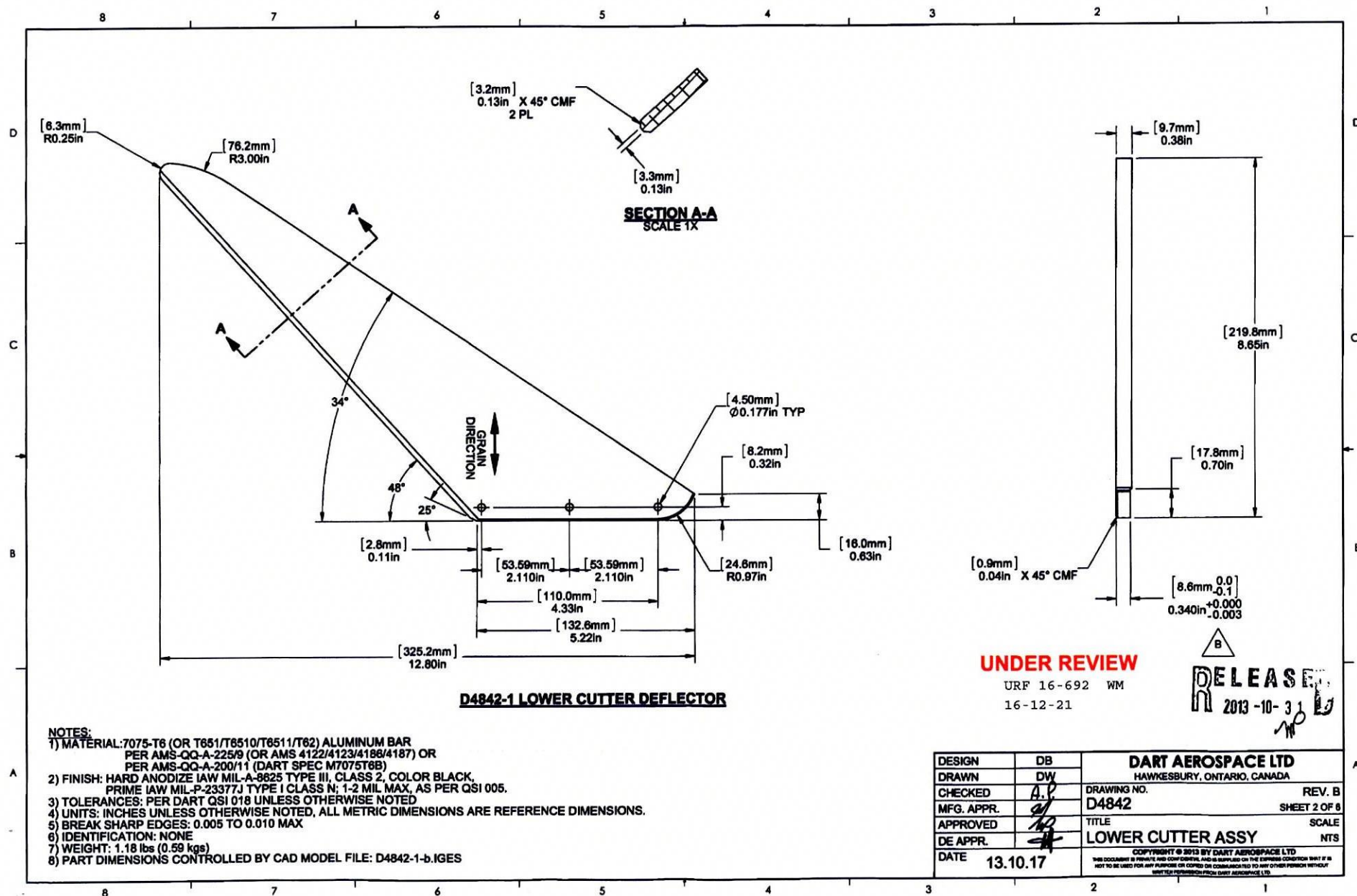
D4842-4 LOWER CUTTER BODY RH
(AUXILIARY VIEW)

UNDER REVIEW

URF 16-692 WM
16-12-21

RELEASE
2013-10-31

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DW		
CHECKED	A.P.	DRAWING NO. D4842	REV. B
MFG. APPR.			SHEET 6 OF 6
APPROVED		TITLE	SCALE
DE APPR.		LOWER CUTTER ASSY	NTS
DATE	13.10.17	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL. IT IS TO BE USED FOR THE PURPOSES AND CONDITIONS SPECIFIED IN THE ASSOCIATED PURCHASE ORDER. IT IS NOT TO BE USED FOR ANY PURPOSES OR CONDITIONS UNLESS SPECIFICALLY AGREED TO BY DART AEROSPACE LTD.	

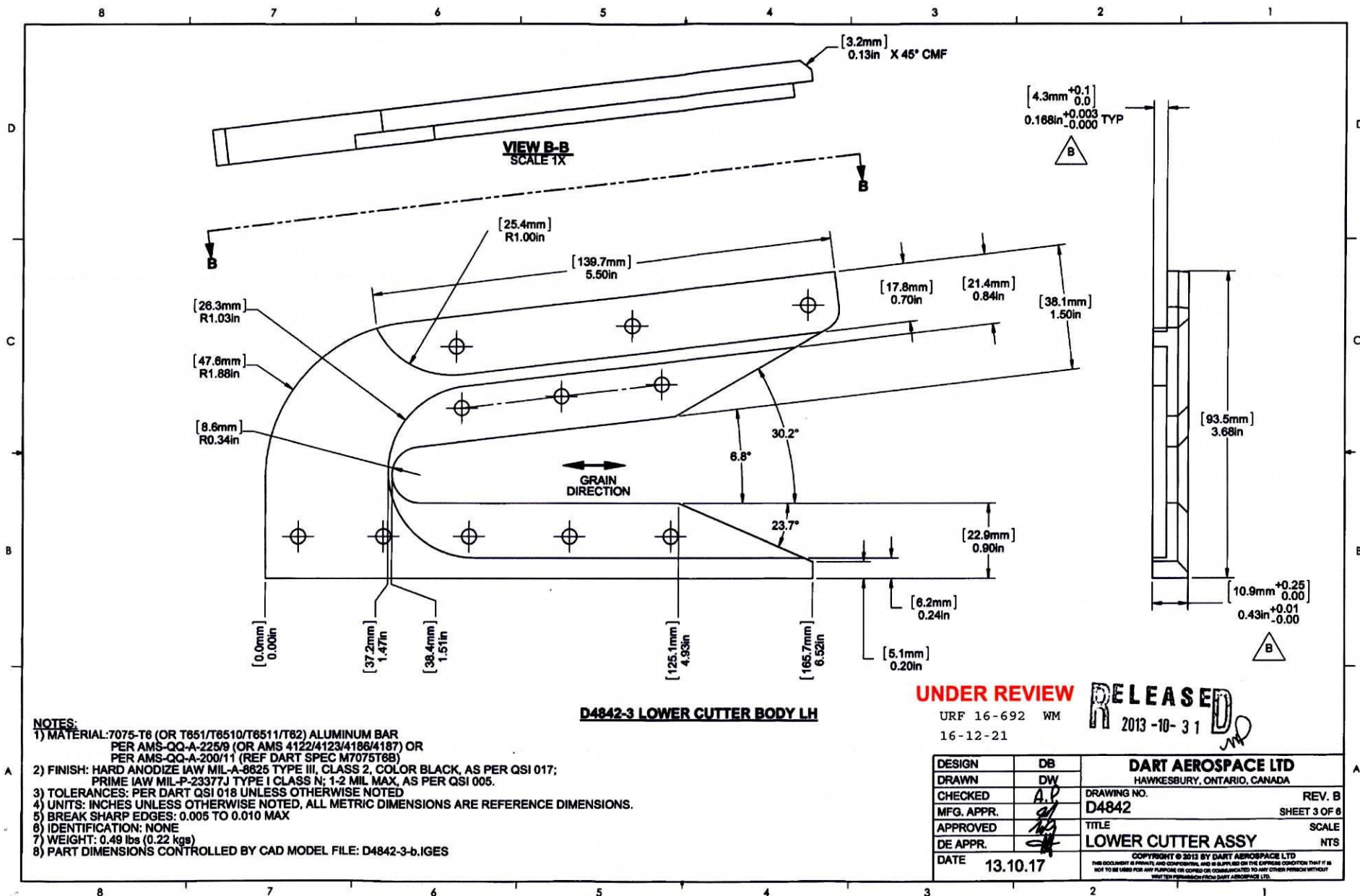


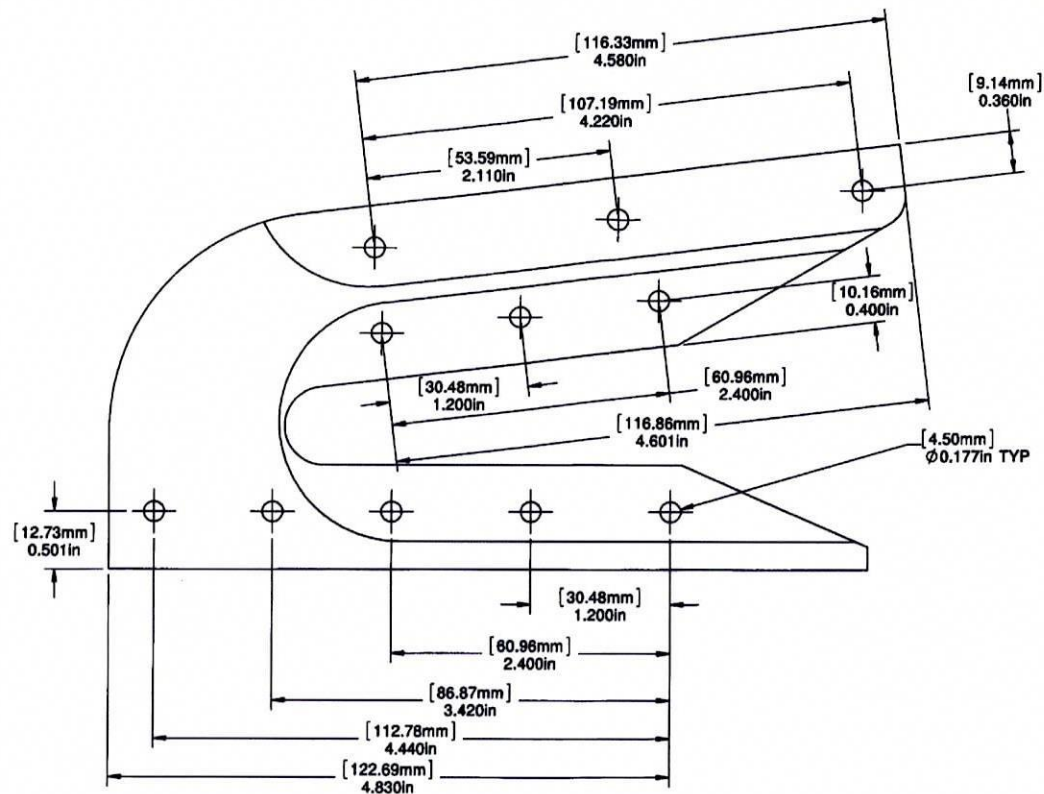
UNDER REVIEW

URF 16-692 WM
16-12-21

RELEASE
2013-10-31

DESIGN	DB	DART AEROSPACE LTD	
DRAWN	DW	HAWKESBURY, ONTARIO, CANADA	
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.	1/1	D4842	SHEET 2 OF 8
APPROVED	1/1	TITLE	SCALE
DE APPR.	1/1	LOWER CUTTER ASSY	NTS
DATE	13.10.17	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS NOT TO BE REPRODUCED OR COPIED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	





D4842-3 LOWER CUTTER BODY LH
(AUXILIARY VIEW)

UNDER REVIEW

URF 16-692 WM

16-12-21

RELEASE
2013-10-31
M

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DW		
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.	2/1	D4842	SHEET 4 OF 6
APPROVED	1/1	TITLE	SCALE
DE APPR.	1/1	LOWER CUTTER ASSY	NTS
DATE	13.10.17	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Diane Baker

From: William Monterroza
Sent: Monday, January 08, 2018 1:22 PM
To: Support San Diego; Kim Johnston; Caitlin Crooks
Cc: Linda Lacelle; Mario Poulin; Maria Scatola; Diane Baker
Subject: RE: New Order n° 4801493469

We cannot remove the under review as we have not had confirmation from Leonardo on the revised drawing. However, we can sign off the U/R and release the parts if they have been made to the concessions. Then the parts can proceed for shipment.

From: Support San Diego
Sent: Monday, January 08, 2018 1:06 PM
To: William Monterroza <wmonterroza@dartaero.com>; Kim Johnston <kjohnston@dartaero.com>; Caitlin Crooks <ccrooks@dartaero.com>
Cc: Linda Lacelle <llacelle@dartaero.com>; Mario Poulin <mpoulin@dartaero.com>; Maria Scatola <mscatola@dartaero.com>; Support San Diego <support.ca@dartaero.com>; Diane Baker <dbaker@dartaero.com>
Subject: RE: New Order n° 4801493469
Importance: High

Hi Will,
We need to have the under review removed from these parts. Please see reason from Maria Luisa below.

Please advise Mario once this is done as we have orders (Caitlin they are yours) in the system.

Thanks,
LISA MCMACHEN
Customer Support

DART AEROSPACE
T 1 613 632-3336 > 241
F 1 613 631-4443
1 800 556- 4166
www.dartaerospace.com



From: Support San Diego
Sent: Wednesday, December 20, 2017 8:51 AM
To: Caitlin Crooks <ccrooks@dartaero.com>
Cc: Kim Johnston <kjohnston@dartaero.com>; Linda Lacelle <llacelle@dartaero.com>; Support San Diego <support.ca@dartaero.com>; Mario Poulin <mpoulin@dartaero.com>
Subject: RE: New Order n° 4801493469

Hi Caitlin,
I believe that these would be your orders. Please contact Leonardo about the shipment delay.

Thanks,
LISA MCMACHEN
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From: Mario Poulin
Sent: Tuesday, December 19, 2017 10:13 AM
To: Support San Diego <support.ca@dartaero.com>; Caitlin Crooks <ccrooks@dartaero.com>
Cc: Kim Johnston <kjohnston@dartaero.com>; Linda Lacelle <llacelle@dartaero.com>
Subject: RE: New Order n° 4801493469

Please note all these order will have to be pushed to end of January;
Sorry for this delay there was confusion on what we were Ok to manufacturer.

16	CAGUS03	Shipping	4801569142	10/3/17	1	0	1	1
16	CAGUS03	Shipping	4801569142	10/3/17	1	0	1	1
16	CAGUS03	Shipping	4801569142	10/3/17	1	0	1	1
465	CAGUS03	Shipping	4801606992	12/4/17	1	0	1	1
465	CAGUS03	Shipping	4801606992	12/4/17	1			

Mario

From: Support San Diego
Sent: Tuesday, December 19, 2017 10:01 AM
To: Mario Poulin <mpoulin@dartaero.com>; Caitlin Crooks <ccrooks@dartaero.com>; William Monterroza <wmonterroza@dartaero.com>
Cc: Support San Diego <support.ca@dartaero.com>; Kim Johnston <kjohnston@dartaero.com>
Subject: FW: New Order n° 4801493469

Hi Mario,
This is for 6F9540V00231 new kits to be made. We can manufacture as we did the last kit shipped (B159673) (W/O attached) (CHG 002).

Hi Caitlin,
We do not need to reference the concession number on the order.

Hi Will,
I believe that we can remove this from U/R.

Thanks,
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From: Bruschino Guido [<mailto:Guido.Bruschino@agustawestland.com>]
Sent: Tuesday, December 19, 2017 8:40 AM
To: Maria Scatola <mecatola@dartaero.com>
Subject: I: New Order n° 4801493469

fyi

Company General Use

Da: Bruschino Guido
Inviato: mercoledì 10 maggio 2017 16:55
A: 'Patrick Smith'
Cc: Agresta Iari; Mancinelli Marco; Stefanelli Marcello; William Monterroza; Eric Downing; Mario Poulin; Sidya Dia; Maria Scatola; Mancini Erminia
Oggetto: R: New Order n° 4801493469
Priorità: Alta

Patrick,

we've cancelled the concession 400000061786 as it doesn't make any sense, it refers to scrapped parts.

I need your permission to cancel the marking of the concession number on the parts 158619, 158618, 158508, and I need to receive the Form 1's with no reference to the concessions.
I know it's time consuming paperwork, but as you know the initial misunderstanding caused this situation, I want to get it fixed.

I've checked the situation with Marcello, no further concessions are necessary as our drawings don't go into such details in terms of thickness, it can be handled internally on DART side.

Thanks,
Guido

Da: Patrick Smith [<mailto:psmith@dartaero.com>]
Inviato: lunedì 8 maggio 2017 23:51
A: Bruschino Guido
Cc: Agresta Iari; Mancinelli Marco; Stefanelli Marcello; William Monterroza; Eric Downing; Mario Poulin; Sidya Dia; Maria Scatola; Mancini Erminia
Oggetto: RE: New Order n° 4801493469

Diane Baker

From: William Monterroza
Sent: Monday, January 08, 2018 2:44 PM
To: Support San Diego; Kim Johnston; Caitlin Crooks; Eric Downing
Cc: Linda Lacelle; Mario Poulin; Maria Scatola; Diane Baker
Subject: RE: New Order n° 4801493469

Under review was signed off for D4842-1 deflector which does not have a significant change to it under the concession that needs to be approved.

Please note that this URF should have been signed off BEFORE the parts are made so that changes are captured prior to part being made.

Therefore, please do not lose sight that D4842-3 Lower Cutter Body does have significant change that caused the concession generated and the URF. Please ensure that BEFORE parts are made, the URF is signed off by engineering. Do not expect the URF to be signed if the parts are already made and the concession/change is not captured.

Thanks
Will

From: William Monterroza
Sent: Monday, January 08, 2018 1:22 PM
To: Support San Diego <support.ca@dartaero.com>; Kim Johnston <kjohnston@dartaero.com>; Caitlin Crooks <ccrooks@dartaero.com>
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To: Mario Poulin <mpoulin@dartaero.com>; Caitlin Crooks <ccrooks@dartaero.com>; William Monterroza <wmonterroza@dartaero.com>
Cc: Support San Diego <support.ca@dartaero.com>; Kim Johnston <kjohnston@dartaero.com>
Subject: FW: New Order n° 4801493469

Hi Mario,
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From: Bruscano Guido [<mailto:Guido.Bruscano@agustawestland.com>]
Sent: Tuesday, December 19, 2017 8:40 AM
To: Maria Scatola <mecatola@dartaero.com>
Subject: I: New Order n° 4801493469

fyi

Company General Use

Da: Bruscano Guido
Inviato: mercoledì 10 maggio 2017 16:55
A: 'Patrick Smith'
Cc: Agresta Iari; Mancinelli Marco; Stefanelli Marcello; William Monterroza; Eric Downing; Mario Poulin; Sidya Dia; Maria Scatola; Mancini Erminia
Oggetto: R: New Order n° 4801493469
Priorità: Alta

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Thanks,
Guido

Da: Patrick Smith [<mailto:psmith@dartaero.com>]

Inviato: lunedì 8 maggio 2017 23:51

A: Bruscino Guido

Cc: Agresta Iari; Mancinelli Marco; Stefanelli Marcello; William Monterroza; Eric Downing; Mario Poulin; Sidya Dia; Maria Scatola; Mancini Erminia

Oggetto: RE: New Order n° 4801493469

Guido,

I have answered the actions below,

Pat

From: Bruscino Guido [<mailto:guido.bruscino@leonardocompany.com>]

Sent: Thursday, May 04, 2017 11:49 AM

To: Patrick Smith <psmith@dartaero.com>

Cc: Agresta Iari <Iari.Agresta@agustawestland.com>; Mancinelli Marco <Marco.Mancinelli@agustawestland.com>; Stefanelli Marcello <Marcello.Stefanelli@agustawestland.com>; William Monterroza <wmonterroza@dartaero.com>; Eric Downing <edowning@dartaero.com>; Mario Poulin <mpoulin@dartaero.com>; Sidya Dia <sdia@dartaero.com>; Maria Scatola <mecatola@dartaero.com>; Mancini Erminia <Mancini.wynnwith@agustawestland.com>

Subject: R: New Order n° 4801493469

Importance: High

Hi Patrick,

as we just discussed at the phone, I confirm that the installation of batch 158508 was completed successfully; however other issues still need to be fixed, so I ask you to:

- 1) Confirm that the part we received with label reporting B/N 158509 was actually to be marked as 158508 (which is the first batch we received with the reduced thickness) In Package I have included the contents of the Work Orders which identify the levels in the manufacturing /identification sequences. The last Work Order to identify the Lower Cutter is Work Order B158508.
- 2) send me via e-mail the Form 1 for the three batches 158619, 158618, 158508. I have included a copy of the original Form One which was with each component when it left Dart.
- 3) send me via mail the identification labels for batch 158619 and 158618 with LH P/N printed on them. The Identification Label for B158618 and B158619 in the envelop which will be expedited to you tomorrow.
- 4) make sure all next deliveries are marked with LH P/N. The 6F9540V00231 part number is for the complete kit, including the hardware, the Lower Cutter P/N D4842-041 is correct.

- According to the LH the part number is correct.



Oggetto: RE: New Order n° 4801493469

I will address each point in the contents below.

To: Patrick Smith <psmith@dartaero.com>

Cc: Agresta Iari <lari.Agresta@agustawestland.com>; Mancinelli Marco <Marco.Mancinelli@agustawestland.com>; Stefanelli Marcello <Marcello.Stefanelli@agustawestland.com>; William Monterroza <wmonterroza@dartaero.com>; Eric Downing <edowning@dartaero.com>; Mario Poulin <mpoulin@dartaero.com>; Sidya Dia <sdia@dartaero.com>
Subject: R: New Order n° 4801493469

Hello Patrick,

we are about to install on the Lower Cable Cutter P/N 6F9540V00231 B/N B158509.

I will let you know if we find any issues with that, however there are a few things I need to highlight:

- 1) The LH P/N 6F9540V00231 is not marked anywhere, not even on the external packaging – this is not acceptable. The inspector identified the part to the DART drawing as we do not have a drawing 6F9540V00231 to inspect it. It is then issued to a series of work orders which then identifies the part on the Form One to the correct part number.
 - 2) The part is marked with concession number 400000061786 even though this part is not impacted by it. If you review the contents of the concession it identifies the part number which is affected by the concession.
 - 3) The concession 400000061786 is still not approved because I asked you to provide the evidence that the proposed repair has been applied on the affected parts, which I didn't receive. I believe the concession is pending approval from LHD until the checks and tests to be performed, these parts have NOT been repaired, it is not economical for DART to repair. New parts have been supplied.
 - 4) If a concession is open, the impacted parts cannot be delivered until it gets approved.
- We were given permission to ship to confirm the fit issues are resolved.

Patrick

Da: Patrick Smith [mailto:psmith@dartaero.com]

Inviato: lunedì 17 aprile 2017 20:09

A: Bruscino Guido

Cc: Mancinelli Marco; William Monterroza; Stefanelli Marcello; Eric Downing; Mario Poulin; Sidya Dia

Oggetto: New Order n° 4801493469

Guido,

Could you please update Dart on the fit of the Lower Cable Cutter which was released on this concession.

Dart is a position to launch manufacturing for six more items and we would like to receive clarifications that the changes identified in the concession corrected the fit issues.

Best regards,

Patrick

From: Bruscino Guido [mailto:guido.bruscino@leonardocompany.com]

Sent: Tuesday, February 14, 2017 4:03 AM

To: Patrick Smith <psmith@dartaero.com>

Cc: Mancinelli Marco <Marco.Mancinelli@agustawestland.com>; William Monterroza <wmonterroza@dartaero.com>; Stefanelli Marcello <Marcello.Stefanelli@agustawestland.com>; Eric Downing <edowning@dartaero.com>

Subject: R: repair order n° 4801424386 - Approval Needed

Hi Patrick,

attached you can find the concession, as you can see it is not closed yet, as the technical evaluation is "Use repaired with known repair", so in order to close the document I need to receive from you the evidence that the proposed repair has been applied on the affected parts; the evidence could be for example the work order detailing the process described in the concession request.

Please send me the document.

Thanks,
Guido

Da: Patrick Smith [<mailto:psmith@dartaero.com>]
Inviato: giovedì 9 febbraio 2017 17:11
A: Bruscino Guido; Eric Downing
Cc: Mancinelli Marco; William Monterroza; Stefanelli Marcello
Oggetto: RE: repair order n° 4801424386 - Approval Needed

Hi Guido,

Could you please provide an update on the status of the concession.

Thanks you,

Patrick

From: Bruscino Guido [<mailto:guido.bruscino@leonardocompany.com>]
Sent: Thursday, February 02, 2017 3:51 AM
To: Eric Downing <edowning@dartaero.com>
Cc: Patrick Smith <psmith@dartaero.com>; Mancinelli Marco <Marco.Mancinelli@agustawestland.com>; William Monterroza <wmonterroza@dartaero.com>; Stefanelli Marcello <Marcello.Stefanelli@agustawestland.com>
Subject: R: repair order n° 4801424386 - Approval Needed

Hello Eric,

thank you; the concession request will be processed asap.

Best Regards,
Guido

Da: Eric Downing [<mailto:edowning@dartaero.com>]
Inviato: mercoledì 1 febbraio 2017 21:30
A: Bruscino Guido
Cc: Patrick Smith; Mancinelli Marco; William Monterroza; Stefanelli Marcello
Oggetto: RE: repair order n° 4801424386 - Approval Needed

Good day Guido,

I have been tasked with supplying you with the most current & updated concession. We have updated the concession as requested.

Please review the attached document and ensure that the updates are correct.

Thanks

Eric Downing

From: Patrick Smith
Sent: Wednesday, February 01, 2017 2:11 PM
To: Eric Downing <edowning@dartaero.com>
Subject: FW: repair order n° 4801424386 - Approval Needed

From: Patrick Smith
Sent: Tuesday, January 31, 2017 10:08 AM
To: 'Bruscino Guido' <guido.bruscino@leonardocompany.com>
Cc: Mancinelli Marco <Marco.Mancinelli@agustawestland.com>; William Monterroza <wmonterroza@dartaero.com>; Stefanelli Marcello <Marcello.Stefanelli@agustawestland.com>
Subject: RE: repair order n° 4801424386 - Approval Needed

Good Day Guido,

I have corrected the document for Note One and Two, but we are not intending to repair the product due to the cost to re-anodize the surface, this is an external process which drive the cost to repair beyond the cost just to replace the units.

I have attached a list of the shipments for the AW169 Cable Cutters and I found one of the Batch Numbers was missing.

Please review the two documents and respond with further improvements.

Patrick

From: Bruscino Guido [<mailto:guido.bruscino@leonardocompany.com>]
Sent: Tuesday, January 31, 2017 9:33 AM
To: Patrick Smith <psmith@dartaero.com>
Cc: Mancinelli Marco <Marco.Mancinelli@agustawestland.com>; William Monterroza <wmonterroza@dartaero.com>; Stefanelli Marcello <Marcello.Stefanelli@agustawestland.com>
Subject: R: repair order n° 4801424386 - Approval Needed

Hi Patrick,

Could you please kindly carry out the following corrections:

Page 1 - Purchase Order: correct number is 480137666

Page 1 - Quantity 20 – Batch Numbers are 13, can you please specify the quantity for each one, so we can have better traceability

Page 2 - Decision to use: scrap – I think *Use Repaired* would be more suitable

Thanks,
Guido

Da: Patrick Smith [<mailto:psmith@dartaero.com>]
Inviato: venerdì 27 gennaio 2017 16:59
A: Bruscino Guido

Cc: Mancinelli Marco; William Monterroza; Stefanelli Marcello
Oggetto: RE: repair order n° 4801424386 - Approval Needed

Guido,

We have updated the Concession with the required dimensions which you requested.

The total dimension will be 22.15+0.05" maximum.

Patrick

From: Bruscino Guido [<mailto:guido.bruscino@leonardocompany.com>]
Sent: Thursday, January 26, 2017 7:00 AM
To: Patrick Smith <psmith@dartaero.com>
Cc: Mancinelli Marco <Marco.Mancinelli@agustawestland.com>; William Monterroza <wmonterroza@dartaero.com>;
Stefanelli Marcello <marcello.stefanelli@agustawestland.com>
Subject: R: repair order n° 4801424386 - Approval Needed

Hello Patrick,

any news for the call?

Guido

Da: Bruscino Guido
Inviato: mercoledì 25 gennaio 2017 15:43
A: Patrick Smith
Cc: Mancinelli Marco; William Monterroza; 'Stefanelli Marcello'
Oggetto: R: repair order n° 4801424386 - Approval Needed

Hi Patrick,

we've discussed this internally, the best way to face the issue is having Cutter Assemblies with maximum total thickness (sealant and primer included) of 22.20 mm; this units shall be handled through concessions until the modification is finally introduced into serial production.

However, in order to make sure everyone's aligned on this, a conference call has to be set, unfortunately not today; I and Marcello are available tomorrow from 14:30 Italian time onwards, would this time suit you? Can you arrange it?

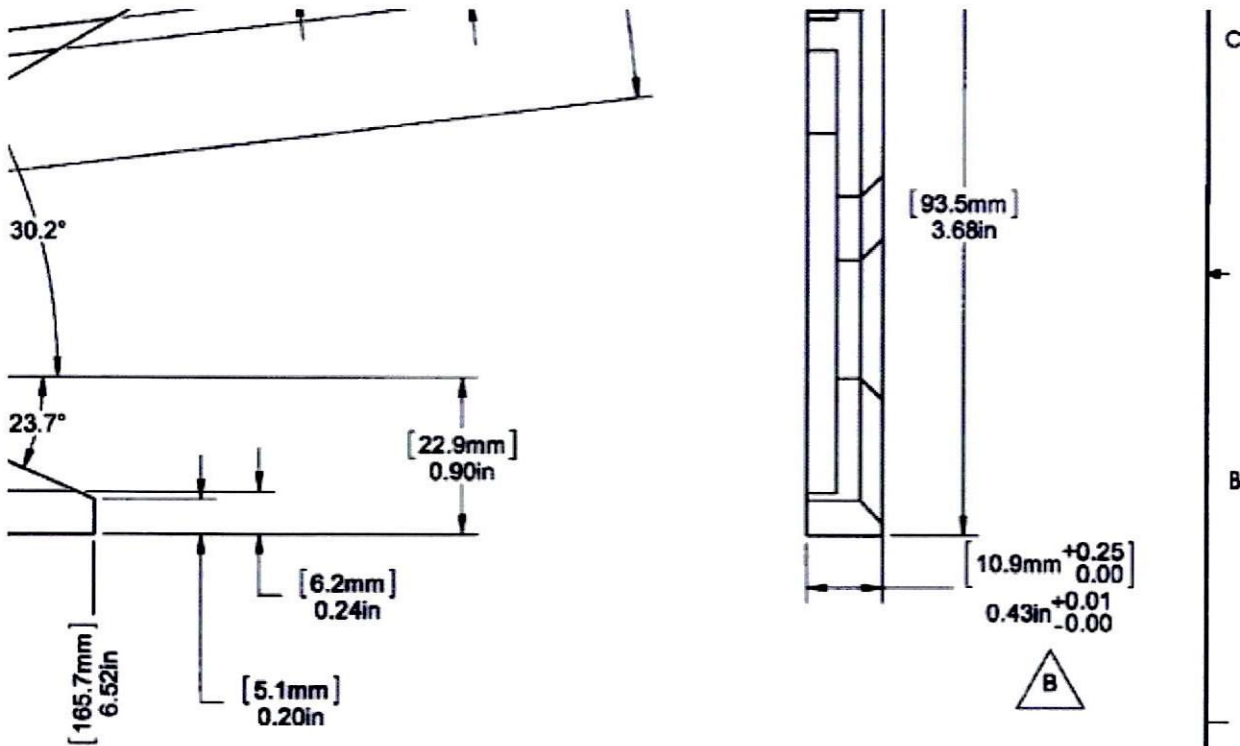
Thanks,
Guido

Da: Stefanelli Marcello [<mailto:marcello.stefanelli@leonardocompany.com>]
Inviato: mercoledì 25 gennaio 2017 15:11
A: Patrick Smith; Bruscino Guido
Cc: Mancinelli Marco; William Monterroza
Oggetto: RE: repair order n° 4801424386 - Approval Needed

Hi gents,

I am available for call, but I think, if I am wrong, the problem has been generated with the rev. B of the lower cutter, see sketch below, where the tolerance had been increased, in my opinion DART can adjust the tolerances in order to not have the problem.

I am available for call after 17:00 Italy time today, if it needs after clarification
 Let me know
 Marcello



DDY LH

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DW		
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.	[Signature]	D4842	SHEET 3 OF 6
APPROVED	[Signature]	TITLE	SCALE
DE APPR.	[Signature]	LOWER CUTTER ASSY	NTS
DATE	13.10.17	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

From: Patrick Smith [mailto:psmith@dartaero.com]
Sent: mercoledì 25 gennaio 2017 13:22
To: Bruscino Guido; Stefanelli Marcello
Cc: Mancinelli Marco; William Monterroza
Subject: Re: repair order n° 4801424386 - Approval Needed

I will be in the office in one hour.

Could you provide a time and phone number and William and myself will contact you.

Pat

Sent from my BlackBerry 10 smartphone on the Bell network.

From: Bruscino Guido
Sent: Wednesday, January 25, 2017 7:10 AM
To: Patrick Smith; Stefanelli Marcello
Cc: Mancinelli Marco; William Monterroza
Subject: R: repair order n° 4801424386 - Approval Needed

Hi Patrick,

attached you can find a new QN issued for the same problem, on a different helicopter.
Given the seriousness and urgency of the issue, when are we arranging the conference call? Marcello what is your availability?

Guido

Da: Bruscino Guido
Inviato: giovedì 19 gennaio 2017 19:22
A: 'Patrick Smith'
Cc: Mancinelli Marco; Stefanelli Marcello; William Monterroza
Oggetto: R: repair order n° 4801424386 - Approval Needed

Hi Patrick,

No problem, I'm available next week; I suggest a usual conference call rather than Skype, as far as I know this is not a tool we can use.
Anyway, also LH Engineering availability is necessary for the call.
I'll process the Concession after the call.

Best Regards,
Guido

Da: Patrick Smith [<mailto:psmith@dartaero.com>]
Inviato: giovedì 19 gennaio 2017 00:21
A: Bruscino Guido
Cc: Mancinelli Marco; Stefanelli Marcello; William Monterroza
Oggetto: RE: repair order n° 4801424386 - Approval Needed

Guido,

The corrected document was completed and is attached.

Could we arrange a skype meeting to discuss the process we need to complete to ensure the design documents are submitted and approved in a favorable timeline?

Please let me know when a good time will be to discuss.

Best regards,

Patrick

From: Patrick Smith
Sent: Wednesday, January 18, 2017 9:09 AM
To: 'Bruscino Guido' <guido.bruscino@leonardocompany.com>
Cc: Mancinelli Marco <Marco.Mancinelli@agustawestland.com>; Stefanelli Marcello <Marcello.Stefanelli@agustawestland.com>; William Monterroza <wmonterroza@dartaero.com>
Subject: RE: repair order n° 4801424386 - Approval Needed

Guido,

Thank you for the clarification and I will try to clarify your points.

The design is not satisfactory, as the parts conform to the design. Our only explanation is the design was provided a finished dimension for the assembly and the two components were designed to meet this dimension. Can you clarify if there were changes to the airframe which reduced the clearance for the parts to be installed, such as the addition of finish coating on the inside of the attachment bracket, as Dart had received no fit problems until this occurrence, so we are not able to identify a root cause.

We will provide a corrected concession QRS-107 shortly, I just want to verify the classification of the change. I am reviewing QRS-115 section 6.3.3. regarding the notification of change.

Best regards,

Patrick

From: Bruscino Guido [<mailto:guido.bruscino@leonardocompany.com>]
Sent: Wednesday, January 18, 2017 5:01 AM
To: Patrick Smith <psmith@dartaero.com>
Cc: Mancinelli Marco <Marco.Mancinelli@agustawestland.com>; Stefanelli Marcello <Marcello.Stefanelli@agustawestland.com>
Subject: R: repair order n° 4801424386 - Approval Needed

Hi Patrick,

the concession request you provided is formally not acceptable.

First of all, the concession request Form to be filled by the supplier is the QRS 107, Word file attached; secondly, the PO number and the quantity of the parts affected by the concession are mandatory. Besides, even if the parts are not serialized, the batch number shall be reported for traceability sake. Finally, if the deviation from the approved design is not yet applied, but tis something you are requesting the permission for, then a Production Permit is more appropriate (form attached).

However, the main point is the following: if the rework that you are proposing is necessary to make the parts compliant with the drawings, there is no need for a Concession/Production Permit. If the rework is necessary because the current design is not satisfactory and is causing issues at the interface with the assembly housing, then the Concession/Production Permit is only an interim solution until the design is officially modified and approved, which should be done quickly.

Please clarify this point.

Best regards,
Guido



Please consider the environment before printing this email.



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038743

Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO038743
PO Date: 1/8/18
Due Date: 2/1/18
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Baker, Diane
Phone: dbaker@dartaero.com

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

JAN 23 2018

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	166820	D4838-1	Upper Cutter Body, LH Issue P/O: _____ ATG, Hard Black Anodize and Prime as per Dwg D4838-1 Rev. A	Firmed	2/1/18	10 pcs	0 pcs	10 pcs	\$11.61/pcs	\$116.10
2	169613	D4703-043	Lock Pin Base Issue P/O to ATG: _____ HARD ANODIZE COLOR BLACK, As Per Dwg D4703	Firmed	2/1/18	4 pcs	0 pcs	4 pcs	\$4.06/pcs	\$16.24
3	168229	646.3313	Upper Guide Issue P/O to ATG : _____ Hard Anodize Color Black and Prime as per DWG 646.3300	Firmed	2/1/18	6 pcs	0 pcs	6 pcs	\$14.46/pcs	\$86.76
4	168224	646.3210	Support Issue P/O to ATG : _____ 1- Hard Anodize Color Black and Prime as per Dwg 646.3200	Firmed	2/1/18	6 pcs	0 pcs	6 pcs	\$15.71/pcs	\$94.26
5	168265	646.9710	Body Issue P/O to ATG : _____ Hard Black Anodize Color Black and Prime as per Dwg 646.9700	Firmed	2/1/18	12 pcs	0 pcs	12 pcs	\$15.86/pcs	\$190.32
6	165649	646.9811	Upper Deflector Issue P/O to ATG : _____ HARD ANODIZE COLOR BLACK, PRIME AS PER DWG 646.9800 REV. A	Firmed	2/1/18	16 pcs	0 pcs	16 pcs	\$33.96/pcs	\$543.36
7	169180	649.5010	Deflector Issue P/O to ATG: _____ HARD ANODIZE COLOR BLACK, AND PRIME AS PER DWG 649.5000 REV. D	Firmed	2/1/18	5 pcs	0 pcs	5 pcs	\$35.36/pcs	\$176.80
8	169184	649.5214	Bracket Issue P/O to ATG : _____ Hard Anodize Color Black and Prime as per Dwg 649.5200	Firmed	2/1/18	5 pcs	0 pcs	5 pcs	\$10.36/pcs	\$51.80
9	169748	650.9201		Firmed	2/1/18	20 pcs	0 pcs	20 pcs	\$7.96/pcs	\$159.20

JAN 24 2018

JAN 24 2018



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038743

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
10	169630	D4842-1	Eyelet Bracket Assembly Issue P/O to ATG : _____ Hard Anodize, Color Black and Prime as per Dwg 650.9200 Lower Cutter Deflector Outsource process- Issue P/O to ATG : _____ HARD ANODIZE COLOR BLACK, PRIME AS PER DWG D4842	Firmed	2/1/18	8 pcs	0 pcs	8 pcs	\$13.41/pcs	\$107.28
11	169388	647.7819	Cross Bracket Fwd Issue P/O to ATG: _____ HARD ANODIZE COLOR BLACK, AND PRIME AS PER DWG 647.7819	Firmed	2/1/18	10 pcs	0 pcs	10 pcs	\$12.61/pcs	\$126.10
12	168245	646.3715	Strut Doubler Issue P/O to ATG : _____ Hard Anodize, Color Black and Prime as per Dwg 646.3700	Firmed	2/1/18	10 pcs	0 pcs	10 pcs	\$7.61/pcs	\$76.10
13	168267	646.9712	Body Issue P/O to ATG : _____ Hard Anodize, Color Black and Prime as per Dwg 646.9700	Firmed	2/1/18	6 pcs	0 pcs	6 pcs	\$15.86/pcs	\$95.16
14	168268	646.9713	Body Issue P/O to ATG : _____ Anodize, Color Black, Prime as per Dwg 646.9700	Firmed	2/1/18	5 pcs	0 pcs	5 pcs	\$8.86/pcs	\$44.30
15	169381	647.1610	Wiper Deflector Fwd Issue P/O to ATG : _____ 1- Hard Anodize, Color Black and Prime as per Dwg, 647.1600	Firmed	2/1/18	6 pcs	0 pcs	6 pcs	\$12.06/pcs	\$72.36
16	169485	647.7612	Breakaway Tip Issue P/O to ATG : _____ Hard Anodize, Color Black and Prime as Per Dwg 647.7600	Firmed	2/1/18	6 pcs	0 pcs	6 pcs	\$12.06/pcs	\$72.36
17	166816	D4823-1	Upper Cutter Deflector Issue P/O to ATG : _____ Hard Anodize, Color Black and Prime as per Dwg D4823	Firmed	2/1/18	12 pcs	0 pcs	12 pcs	\$12.51/pcs	\$150.12
Grand Total:									\$2,178.62	

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

[Handwritten signature]



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 914523

Date: 30-Jan-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
10 ea	Part: D4838-1 Upper Cutter Body, LH Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (.1 - 2 mils) per drawing. Job: 22348		Rev: A PO: PO038743 Line: 1
8 ea	Part: D4842-1 Lower Cutter Deflector Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (.1 - 2 mils) per drawing. Job: 22356		Rev: B PO: PO038743 Line: 10
6 ea	Part: 646.9712 Body Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Job: 22359		Rev: D PO: PO038743 Line: 13
6 ea	Part: 646.3313 Upper Guide Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22350		Rev: NC PO: PO038743 Line: 3
6 ea	Part: 646.3210 Support Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22351		Rev: NC PO: PO038743 Line: 4
Made in Canada.			



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 914523

Date: 30-Jan-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

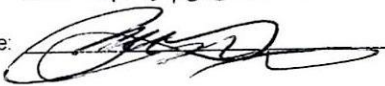
Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
5 ea	Part: 649.5214 Bracket Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22355	Rev: A	PO: PO038743 Line: 8
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>30/1/2018</u> Certified Signature: <u></u> Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt. Made in Canada.			